

Size: 8,511 acres
Mission: Serve as host to many organizations, including Headquarters to Air Force Material Command
HRS Score: 57.85; placed on NPL in October 1989
IAG Status: IAG signed in March 1991
Contaminants: Waste oil and fuels, acids, plating wastes, and solvents
Media Affected: Groundwater and soil
Funding to Date: \$176.4 million
Estimated Cost to Completion (Completion Year): \$38.3 million (FY2028)
Final Remedy in Place or Response Complete Date for All Sites: FY1999



Dayton, Ohio

Restoration Background

Past activities at Wright-Patterson Air Force Base created spill sites and unlined waste disposal areas, including landfills, fire training areas, underground storage tanks, earth fill disposal areas, and coal storage areas. Investigations identified 67 sites. Soil and groundwater have been contaminated with volatile organic compounds; semivolatile organic compounds; and benzene, toluene, ethyl benzene, and xylene compounds. Fire training exercises conducted in unlined pits contaminated soil and groundwater with fuel and its combustion by-products. In FY97, two new sites, Contaminated Groundwater Area A/C and Contaminated Groundwater Area B were added to address mingled groundwater plumes and expedite source area site closure.

In FY89, the installation began Remedial Investigation and Feasibility Study (RI/FS) activities for 39 sites. Early in FY92, the installation completed a Removal Action along the installation boundary to intercept and treat contaminated groundwater flowing toward wellfields in the city of Dayton.

In FY94, the Record of Decision (ROD) for Landfills 8 and 10 was approved and the Remedial Design (RD) was completed for capping the landfills. An Engineering Evaluation and Cost Analysis and a Removal Action Plan for all landfills were approved by the regulatory agencies.

In FY95, the installation conducted a pilot-scale study of bioslurping using vacuum-enhanced extraction. It also continued to operate the air-sparging groundwater treatment system, began constructing a Remedial Action at Landfills 8 and 10, and performed an Interim Action at Landfill 5 to construct a landfill cap. A Restoration Advisory Board was formed.

In FY96, a ROD was completed for 21 sites that required no further action. RD was initiated for Landfills 1, 2, 3, 4, 6, and 7, following the basewide Removal Action presumptive remedy process.

In FY97, RIs were completed at the remaining 10 sites within Operable Units 8, 9, and 11. A bioslurper was installed and began operating at Fuel Spill Site 5. Geoprobe technology and an on-site laboratory were used, and a natural attenuation ROD for Fuel Spill Sites 2, 3, and 10 was completed. The installation continued its involvement as a principal partner in the "Groundwater 2000" initiative to preserve and protect the region's sole-source drinking water aquifer. Landfill cover was completed at Landfill 11.

FY98 Restoration Progress

The installation decided to prepare a groundwater ROD rather than the planned Action Memorandum. Actions on this ROD were delayed because of the complexity of the groundwater risk assessment and transport model. A final ROD was completed for 40 Installation Restoration Program sites. Only the two remaining groundwater sites do not have a final ROD.

Landfill caps were installed for Landfills 1, 2, 6, 7, and 9, and a french drain was installed at Spill Site 11. The installation completed excavation of the Landfill 12 contents. A Removal Action was designed, and construction work began, at Heating Plant 5.

The installation received the Groundwater Guardian Award for its cleanup efforts and aquifer protection initiatives. A Defense and State Memorandum of Agreement (DSMOA) Cooperative Agreement work plan was developed with Ohio EPA.

Plan of Action

- Complete the groundwater ROD

- Complete the Removal Action at Heating Plant 5
- Conduct a Treatability Study to evaluate removal efficiency for the vinyl chloride plume in Area B in FY99
- Conduct Phase I of monitoring-well abandonment in FY99
- Submit delisting petition for the soils portion of the base in FY99
- Modify groundwater treatment system to reduce operation and maintenance costs in FY00
- Conduct Phase II of monitoring-well abandonment in FY00

FY99 FUNDING BY PHASE AND RELATIVE RISK

